# DISRUPTIVE INNOVATION: THE HIGH-END MARKET PERSPECTIVE

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ABSTRACT

*Earlier research has focused on the single dimension of disruptive innovation that originates in the low-end market. Disruptive innovators tend to focus on targeting niche markets at the lower-end of the economic ladder, providing alternatives to existing products. Disruptive innovators that originate in low-end markets are inferior to existing products. However, they improve over time to attract mainstream customers and take over incumbents. This single dimension has ignored the disruptive innovation that originates in the high-end market in terms of superior products. This research focuses on the latter context and the notion of consolidating high-end disruption into disruptive innovation frameworks. High-end disruptive innovation is successful when escalated affordably. Customers cannot afford superior products in the high-end market, though with passage of time they achieve affordability and attract mainstream customer to disrupt the market. In both cases, market incumbents ignore disruptive innovation. They enjoy profit margins at the expense of low-end disruptors and overlook market volume at the cost of high-end disruption. Initially, in both cases, incumbents react by driving profitability through sustaining innovations.*

**Keywords:** Disruptive Innovation, Low-End and High-End Market, Low-Cost, Affordability, and Incumbents

## INTRODUCTION

Over the past 20 years, disruptive innovation has emerged as a symbol for rapid growth and technological advancement and it has received interest from academics and experts alike (Isaacson, 2015; Berkun 2010; Christensen et. al, 2015). The increasing use of disruptive innovation theory is not constrained to the discipline of innovation but has been widely applied to technology (Hardman et.,

al 2013), education (Thompson, 2016) and other industries such as healthcare (Ramdorai and Herstatt, 2015). Regardless of the exclusivity of these different fields, the underlying notion of disruptive innovation is considered to be permanent as a result of different business settings. That is why it can be examined as a progressively independently concept. Nevertheless, for the same reason, disruptive innovation has been widely researched across divergent industry settings such as in computing (Akar and Mardiyan, 2016), hospitality and tourism (Guttentag, 2013; Joshi, 2018), healthcare (Ramdorai and Herstatt, 2015) and the automotive industry (Bohnsack, Pinkse and Kolk, 2014)

The evolution of new technologies has had a significant effect on existing technologies and has transformed many industries. These new technologies not only challenge traditional technologies but also render them obsolete in some industries. The introduction of disruptive innovation theory has practical implications for these transformations. Most of them are based on low performance attributes that are initiated at the lower end of the market. Contemporary studies have raised questions regarding technologies and businesses that have transformed traditional technologies at the high end of the market (Akbar and Ozuem, 2018; Rhee et. al, 2012). The philosophical impact of technologies or businesses in the high-end of the market can be explored from the perspective of disruptive innovation theory. Conventionally, disruptive innovation theory shapes existing technologies or businesses by targeting the existing market or by creating new markets. In both cases disruptive innovation originates at the lower-end of the market (Christensen Macdonald and Raynor, 2015).

In this context, it can be argued that conventionally disruptive innovation has focused on a single market dimension i.e. the low-end market (Christensen et al., 2015, 2018). Yet it has not been investigated in the context of the high-end market. Existing theory in relation to disruptive innovation fails to explain high-end disruptive innovation. As a result, current thinking gives managers the single option of using low-end market strategies to create disruptive innovation. Consequently this paper tries to fill a gap in knowledge by highlighting the importance of high-end disruptive innovation strategies that can be used by managers to achieve competitive advantage. Nonetheless, the high-end market has received little attention. In business and innovation management, encroachments from the higher-end market and affordability strategies are the least understood and most emergent areas.

## Contextualization: Disruptive Innovation.

Many scholars defined innovation in relation to the dimension of product, process and service contemplating the degree of novelty (Luecke and Katz, 2003; Albury, 2005; Jacobs and Snijders 2008). While extant literature provides divergent meanings of innovation, Assink defined it as *"The process of successfully creating something new that has significant value to the relevant unit of adoption."* (Assink, 2006, p.217). Conversely, for both academics and practitioners, disruptive innovation means different things. For instant Assink (2006) defined disruptive innovation as *"…to generate and explore radical new ideas and concepts, to experiment with solutions for potential opportunity patterns detected in the*

*market's white space and to develop them into marketable and effective innovations…" (P.219).* In the existing literature, one perception is that disruptive innovation originates in existing or new markets at the lower end (Christensen et al., 2015). Equally, ignoring the impact of innovation at the high-end can result in challenges for the firm (Hardman et al., 2015). Nevertheless, some researchers have attempted to explore technological transformation as a form of radical innovation. Some suggest that radical innovation creates more difficulties for incumbents as compared to incremental innovation (see Ettlie, Bridges and O'Keefe, 1984; Dewar and Dutton, 1986). However, the complexity of forming these categorizations into a coherent framework increased when some academics presented a completely different categorization. Such academics argued that, in terms of discontinuing innovation, the causes and challenges faced by existing firms is difficult to understand. Some firms have successfully managed radical innovation. As a result, they have conceptualised innovation as a form of either enhanced or destructive competence transformation (Tushman and Anderson 1986). In contrast, some academics have determined that present categorizations do not account for failure amongst incumbents. In such cases they have defined innovation as either modular or architectural (Henderson and Clark, 1990).

Though, Christensen's (1997) typology for sustaining disruptive innovation has increased the complexity of incorporating high-end disruption. This has led to a different understanding of disruptive innovation theory in the contexts of different dimensions of the marketplace. The crucial aspect of this study is to understand the process and reality of disruptive innovation. Disruptive innovation begins with the emergence of different sets of performance attributes in existing or new markets at the lower end of the economic ladder. Mainstream customers view these products as unattractive because of their low performance features. Whereas, over time these performances improve and attract mainstream customers from mainstream markets to achieve disruption as in Figure 1.1 (Yu and Hang 2010; Vance, 2013). However, the scope of conceptualisation that disruption only adapts to low-end encroachment remains complex. Likewise, superior and distinct performance attributes adapt to high-end encroachment by achieving affordability to attract mainstream customers. The nature of the high-end market inherently makes it suitable for unique performance attributes. Organisations can thus achieve efficiency in production. Such conditions increase the potential for entrants to attract mainstream customers in order to disrupt the market (Rhee et al., 2012; Govindarajan and Kopalle, 2005; Schmidt and Druehl, 2008).

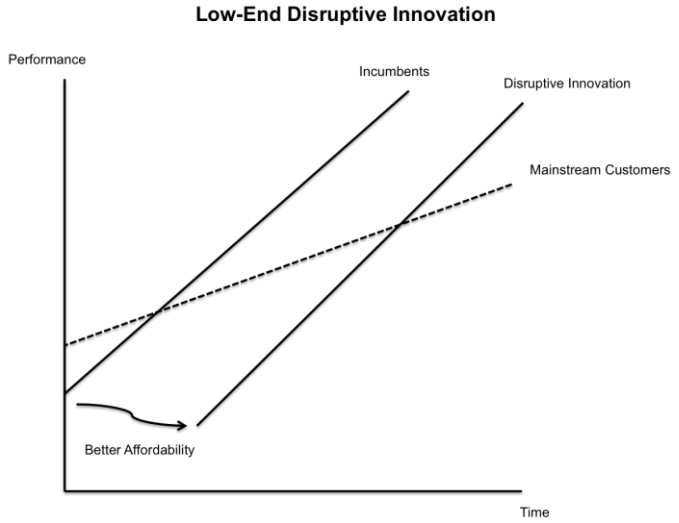


**Figure 1 Low End Disruptive Innovation**

## The High-End Market and Affordability

The concept of the high-end market is the subject of various definitions in the literature. For example, Rhee et al. (2012) suggest that some firms enter the high-end market and then diffuse downwards using distinct strategies. This kind of market encroachment has been described using three different labels. The first is 'immediate high-end encroachment' which describes the pursuit of customers in 'old markets' in high-end settings. This involves stealing some of the original market share. The second format is 'new attribute high-end encroachment' comprising of improvements to original products and the addition of new dimensions to attract both existing and new customers in the high-end market. Finally, 'New Market high-end encroachment' describes the attraction of customers to new markets at the high-end (Rhee et al., 2012, p. 721).

The literature highlights the phenomenon of disruptive innovation in existing and new markets at the lower-end. Initial performance is typically inferior to existing performance in the mainstream market. Low-end customers are attracted to such performances because of their low cost and distinct features, which are more appealing than many existing features. Though, over time, these performances are improved to attract mainstream customers as a result of disrupting the market (Govindarajan and Kopalle, 2005). In contrast, innovation that carries a high price is considered to be a form of high-end disruptive innovation (Govindarajan and Kopalle, 2005). This is a grey area that is overlooked by Christensen's theory of disruptive innovation. For example, corporate executive welcomed, the introduction of the cellular phones despite the fact that they were seen as expensive. Yet, mobile phones enjoyed success since they offered convenience and portability. Despite the advantages that mobile phones offered over landline phones, mainstream customers continued to favour landlines for their comparatively low prices, better coverage and reliability. Yet, over time, mobile technology caused disruption, as the progression of technology made it possible to increase the coverage and reliability of the service at a cost that was acceptable and affordable to mainstream customers. Likewise, the high-end market is an appropriate setting to target customers that are looking for superior performance

attributes that are not available in mainstream markets. Price, in the context of superior performance is high and is typically out of reach for mainstream customers. Conversely, over time these firms achieve efficiency in production along with developments in other technologies that brings costs down and makes the product available to mainstream customers at a price they can afford see figure 1.2 (Rhee et al., 2012). Nevertheless, the primary step to disrupting the market at the higher-end is costly and challenging because it requires huge investments from the outset. For example, Chobani required approximately $1 billion of investment to disrupt from the higher-end (Vazquez Sampere, 2016).

On the other hand, the nature of low-end market disruptive innovation seeks out the least profitable customers, as they are not looking for superior performance features. As a result, market incumbents ignore these entrants and instead focus on improving their existing products to make more profit from mainstream customers (Christensen, 2006; Yu and Hang, 2010). Consider the example of Honda, which entered the US market with its flagship scooter, thus focusing on the least profitable customers. Incumbents did not view this manoeuvre as a threat. Likewise, new market disruption that focuses on prospective consumers gives rise to a new industry. For example, stents initially involved itself in the catheter diagnosis market, but later diffused down into the cardiac surgery markets (Vazquez Sampere, 2016). Conversely it can be argued that incumbents also ignore disruptive innovation in higher-end markets because they want to increase their market share by driving sales volumes whilst ignoring disruptive innovation as a threat.

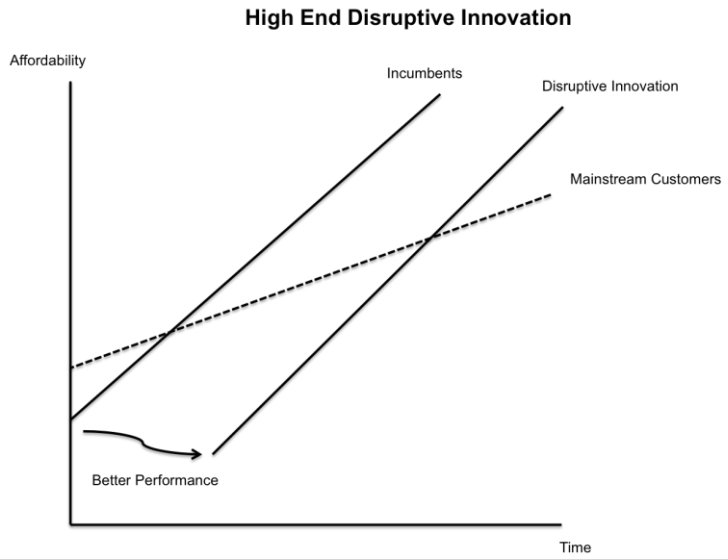


**Figure 2 High End Disruptive Innovation**

Looking at these two contrasting phenomena it can be argued that disruptive innovation can be achieved not only at the lower end of the market, but in high-end markets as well. The commonality between the two formats is affordability. Christensen's (1997) theory of disruptive innovation specifically speaks about improved performance over time in low-end markets, so that the product can be adopted in mainstream markets. Though, this ignores the fact that performance in

high-end markets is already superior. To cause disruption, organisations only need to achieve superior efficiency in production to make the product affordable for the mass-market consumer. Tesla, for example has created a new model of disruption, in which products start at the high end of the market while encroaching down over time by achieving efficiency. During its 10-year history Tesla's initial prices were eccentrically high, at approximately $100,000. This was reduced to a price of $70,000 in 2015, and its latest version in 2017 is priced at $35,000. The latest version, a Model 3 Sedan has secured 400,000 pre-orders (see Rhee et al., 2012; Eisler, 2016; Butler and Martin, 2016). However, it must be noted that not all innovation at the high-end of the market is seen as affordable, and so not all innovations can disrupt the market. Such products are considered luxurious and they are popular with ultra profitable customers in ultra premium markets. Examples of these products include Ferrari and Lamborghini, which only serve ultra premium markets. These kinds of products have established their image as luxurious products and therefore only serve the ultra premium niche market.

Consequently, it can be argued that disruptive innovation from the lower-end of the market seeks to improve performance, while in higher end markets it seeks to achieve efficiency to bring costs down. In both cases the commonality is affordability. Despite the market segment context, if disruptive innovation products provide unique and improved performance attributes, and appeal as substitutes to existing options at affordable prices to attract mainstream customers, this can lead to disruptive innovation. The following table shows characteristics of low-end and high-end disruptive innovation.

| Disruptive Innovation | |
|---|---|
| Low-End Disruption | High-End Disruption |
| 1. Originates in low-end market<br>2. Ignored by Incumbents<br>3. Incumbents enjoy profits from existing customers through sustaining innovation.<br>4. Disruptive Innovation improves overtimes.<br>5. Incumbents sustaining innovation over shoot the market<br>6. Mainstream Customers divert to disruptive innovation | 1. Originates in high-end market with different attributes<br>2. Ignored by Incumbents enjoy profits from existing customers through sustaining innovation.<br>3. Disruptive Innovation brings cost down and achieve affordability<br>4. Incumbents sustaining innovation over shoot the market<br>5. High-end disruptive innovation becomes affordable and adopted by mainstream customers |

## MANAGERIAL IMPLICATIONS AND CONCLUSION

Nielsen's report suggests that innovation is not an easy process, as it seems the success rate of new innovation is only 0.46% (Christensen et al., 2016). Consequently Shane (2008) contends that the commercialisation of new innovation is challenging, and this creates even more hurdles for start ups because the majority of them fail in less than five years. On the other hand, some start ups

are more successful than others, such as Tesla, Transfer wise, Airbnb, Uber, Deliveroo and others. These businesses conceivably may have something in common that makes them successful, which is very thoughtful and can be used for the success of other start ups. On the other hand, entrepreneurs play a very important role in changing industries, yet the extent of success is limited (Schumpeter, 1934). Thus, the attraction of entrepreneurship has driven practitioners to focus on introducing innovations that are superior and can potentially disrupt the market Vazquez Sampere, 2016). There are several examples of superior innovation replacing inferior innovation, such as candles being replaced by electricity, aircraft taking over from cruises and cellular phones over landlines. In the late 1970s, low-cost inferior goods with incremental innovation represented a new trend, which transformed many industries (Vazquez Sampere, 2017). This is also evident in Christensen's (1997) work on disruptive innovation. He suggested that low cost goods are not seen as a threat by existing firms since they have sufficient time and no competition pressure to focus on improving themselves and disrupting the market as they improve over time.

On the other hand, the findings present a list of different categories of innovation typologies. However, the nature of these innovations is defined by either minor improvements or dramatic change, which can be categorised into either incremental innovation or radical innovation. Hence, it can be argued that radical innovation can enter from either side to disrupt the market. The example of iPhone is salient here. This product represented a radical change in comparison to Sony Walkman, and disrupted the market from the higher-end. Consequently, the existing theory of disruptive innovation is limited to disruptive innovation at the lower end of the market and this represents a gap in knowledge. This study seeks to fill this gap by consolidating all kinds of markets for radical changes and disruption, which imply, manager can use these different kind of strategies to achieve competitive advantage and create disruptive innovation from either side of the market.

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